AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the Application.

LISTING OF CLAIM

- 1-12 (cancelled).
- 13. (currently amended) The A compound according to claim 12, of Formula III,

wherein, R³, R⁵, X, Y, and Q are as defined above; or a pharmaceutically acceptable salt thereof, wherein:

- R^{1a} is selected from halogen, lower perfluoroalkyl, -NO₂, -OR⁵, and optionally substituted C₁₋₄alkyl; and R^{1b} is selected from halogen, -OR⁵; -N(R⁵)R⁵, -SR⁵, perfluoroalkyl, and optionally substituted lower alkyl-;
- R³ is independently selected from -H, halogen, trihalomethyl, -CN, -NO₂, -OR⁵, $-N(R^5)OR^5$, $-ON(R^5)R^5$, $-N(R^5)N(R^5)R^5$, $-N(R^5)R^5$, $-S(O)_{0.2}R^5$, $-SO_2N(R^5)R^5$, $-CO_2R^5$, $-C(O)N(R^5)R^5$, $-N(R^5)SO_2R^5$, $-N(R^5)C(O)R^5$, $-N(R^5)CO_2R^5$, $-C(O)R^5$, $-C(=NR^7)N(R^5)R^5$, $-C(=NR^7)R^5$, $-C(=NR^7)OR^5$, $-N(R^5)C(=NR^7)N(R^5)R^5$, optionally substituted lower alkyl, optionally substituted lower alkenyl, optionally substituted lower alkynyl, optionally substituted aryl, optionally substituted heterocyclyl, optionally substituted heterocyclylalkyl, and optionally substituted arylalkyl;

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- each R⁵ is independently selected from -H, optionally substituted lower alkyl, optionally substituted aryl, optionally substituted lower arylalkyl, optionally substituted heterocyclyl, and optionally substituted lower heterocyclylalkyl; or
- two of R⁵, together with the atom or respective atoms to which they are attached, can combine to form an optionally substituted three- to seven-membered heterocyclic;
- each R⁶ is independently selected from -H, halogen, trihalomethyl, -CN, -NO₂, -NH₂, $-OR^5$, $-N(R^5)R^5$, $-S(O)_{0.2}R^5$, $-SO_2N(R^5)R^5$, $-CO_2R^5$, $-C(O)N(R^5)R^5$, $-N(R^5)SO_2R^5$, -N(R⁵)C(O)R⁵, -N(R⁵)CO₂R⁵, -C(O)R⁵, optionally substituted lower alkyl, optionally substituted aryl, optionally substituted heterocyclyl, optionally substituted heterocyclylalkyl, and optionally substituted arylalkyl; or
- two of R⁶, together with the atom or atoms to which they are attached, can combine to form one of an optionally substituted three to seven-membered alicylic, and an optionally substituted three to seven-membered heteroalicylic;
- each R⁷ is independently selected from -H, -CN, -NO₂, -N(R⁵)R⁵, -OR⁵, -S(O)₀₋₂R⁵, -SO₂N(R⁵)R⁵, -CO₂R⁵, optionally substituted lower alkyl, optionally substituted lower alkenyl, and optionally substituted lower alkynyl; or
- R⁵ and R⁷, together with the atom or atoms to which they are attached, can combine to form a five- to seven-membered optionally substituted heterocyclyl;
- each of X and Y is independently selected from -C(=O)-, -C(R⁶)R⁶-, -O-, -N(R⁵)-, -C(=NR⁷)-, and -S(O)₀₋₂-; provided when X is -O- or -N(R⁵)-, then Y cannot contain phenyl, napthyl, cyclohexyl, dihydronapthyl tetrahydronapthyl, or a fiveto six-membered heteroaryl, each optionally substituted; and

Q is either = N- or = C(H)-.

(currently amended) The compound according to claim 13, wherein R1a is 14. selected from -NO₂, halogen, perfluoroalkyl, haloalkyl, and optionally substituted C₁. 2alkyl, and optionally substituted -O-C₁₋₂alkyl.

- (original) The compound according to claim 14, wherein R³ is selected from 15. optionally substituted -O-C₁₋₄alkyl, -O-C₁₋₄perfluoroalkyl, optionally substituted -N(H)C₁₋₄alkyl, optionally substituted -N(C₁₋₄alkyl)C₁₋₄alkyl, optionally substituted $-S(O)_{0-2}-C_{1-4}$ alkyl, and optionally substituted $-S(O)_{0-2}-C_{1-4}$ perfluoroalkyl.
- 16. (original) The compound according to claim 15, wherein Y is either -N(H)- or $-C(R^6)R^6$ -.
- 17. (original) The compound according to claim 16, wherein X is selected from -O-, $-N(R^5)$ - and -S-.
- (original) The compound according to claim 17, wherein Y is -C(R⁶)R⁶-; wherein 18. each R⁶ is independently selected from -H, halogen, trihalomethyl, -NH₂, optionally substituted -O-C₁₋₄alkyl, optionally substituted -N(H)C₁₋₄alkyl, optionally substituted -S-C₁₋₄alkyl, optionally substituted lower alkyl, optionally substituted heterocyclyl, and optionally substituted heterocyclylalkyl.
- (original) The compound according to claim 18, wherein Y is -C(H)R⁶-; wherein 19. R⁶ is independently selected from -H, halogen, trihalomethyl, -NH₂, optionally substituted -O-C₁₋₄alkyl, optionally substituted -N(H)C₁₋₄alkyl, optionally substituted -S-C₁₋₄alkyl, optionally substituted lower alkyl, optionally substituted heterocyclyl, and optionally substituted heterocyclylalkyl.
- (original) The compound according to claim 19, wherein O is =C(H)-. 20.
- 21-28. (cancelled)
- (currently amended) The compound according to claim 28, 13, wherein R^{1a} is 29. selected from halo, lower perfluoroalkyl, -NO₂, optionally substituted -O-C₁₋₄alkyl, and optionally substituted C₁₋₄alkyl.
- 30-33. (Cancelled)
- (currently amended) The A compound according to claim 1, selected from Table 34. 3.

Table 3

Entry	Name	Structure
1	2-[(3-cyano-4,6-dimethyl-5- nitropyridin-2-yl)oxy]-N-[3- (trifluoromethyl)phenyl]acetamide	O_2N CN N O N CF_3
5	N ² -[2-amino-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]glycinamide	H ₂ N N N CF ₃
7	2-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]thio}-N- [3-(methyloxy)phenyl]acetamide	H_2N N N N N N N N N N
9	2-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]thio}-N- (4-chlorophenyl)acetamide	H_2N N N N N N N N N N
11	2-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]thio}-N- (3-chlorophenyl)acetamide	H ₂ N N S N CI
14	2-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]oxy}-N- [3-(trifluoromethyl)phenyl]acetamide	H ₂ N N O H F F

Table 3

Entry	Name	Structure
16	2-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]thio}-N- methyl-N-[3- (trifluoromethyl)phenyl]acetamide	H ₂ N N S N CF ₃
17	N ² -[4-amino-6-(methylthio)-1,3,5- triazin-2-yl]-N-[3- (trifluoromethyl)phenyl]glycinamide	H_2N N N N N N N N N N
20	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]glycinamide	H_2N N N N N N N N N N
30	2-amino-4-({2-[2,5-bis(methyloxy)phenyl]-2-oxoethyl}thio)-6-(methylthio)pyrimidine-5-carbonitrile	H_2N N S CN O O O O
31	2-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]thio}-N- [4-fluoro-3- (trifluoromethyl)phenyl]acetamide	H_2N N S CN H CF_3 CF_3
34	2-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]thio}-N- [4-chloro-3- (trifluoromethyl)phenyl]acetamide	H_2N N S CN H CF_3 CI

Table 3

Entry	Name	Structure
35	2-amino-4-(methylthio)-6-({2-oxo-1-[3-(trifluoromethyl)phenyl]pyrrolidin-3-yl}thio)pyrimidine-5-carbonitrile	H_2N N S CN CF_3 CF_3
36	2-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]thio}-N- [6-(trifluoromethyl)pyridin-2- yl]acetamide	H_2N N S CN H N S N N S N N S
37	2-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]thio}-N- [4-(trifluoromethyl)pyridin-2- yl]acetamide	H_2N N N S CN N N S N N N S N N N S N
41	2-{[2-(acetylamino)-5-cyano-6- (methylthio)pyrimidin-4-yl]thio}-N- [3-(trifluoromethyl)phenyl]acetamide	S H F F
42	(2S)-2-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]oxy}-N- [3- (trifluoromethyl)phenyl]propanamide	-s N
45	2-{[2-amino-5-formyl-6- (methylamino)pyrimidin-4-yl]thio}- N-[3- (trifluoromethyl)phenyl]acetamide	NH ₂ NH ₂ NH _N

Table 3

Entry	Name	Structure
46	2-{[2-amino-5-formyl-6- (methylthio)pyrimidin-4-yl]oxy}-N- [3-(trifluoromethyl)phenyl]acetamide	NH2 N= O
47	2-{[4-amino-6-(methylthio)-1,3,5- triazin-2-yl]oxy}-N-[3- (trifluoromethyl)phenyl]acetamide	H ₂ N N O H F F
54	2-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]thio}-N- [2-(methyloxy)-5- (trifluoromethyl)phenyl]acetamide	H_2N N S N H_2N N S O CF_3
55	2-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]thio}-N- [2-chloro-5- (trifluoromethyl)phenyl]acetamide	CF ₃ ON H
58	N ² -[2-amino-5-[(E)-hydrazonomethyl]-6-(methylthio)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]glycinamide	S NH ₂ N N N N N N N N N N N N N N N N N N N

Table 3

Entry	Name	Structure
59	N ² -[2-amino-5-[(E)- (hydroxyimino)methyl]-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]glycinamide	NH ₂ N N N N N N N N N N N N N N N N N N N
60	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L- alaninamide	S NH ₂ N N N N N N N N N N N N N N N N N N N
61	2-{[2-amino-5-cyano-6- (methylamino)pyrimidin-4-yl]thio}- N-[3- (trifluoromethyl)phenyl]acetamide	NH N N N N S N N F F
62	2-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]thio}-N- [2-amino-5- (trifluoromethyl)phenyl]acetamide	H ₂ N N S N H NH ₂
63	2-amino-4-(methylthio)-6-({[6- (trifluoromethyl)-1H-benzimidazol-2- yl]methyl}thio)pyrimidine-5- carbonitrile	H_2N N N N N N N N N N
64	2-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]hydrazinecar boxamide	H ₂ N N H N F F

Table 3

Entry	Name	Structure
65	N ² -[5-cyano-2-(methylamino)-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]glycinamide	
66	2-{[2-amino-5-cyano-6- (dimethylamino)pyrimidin-4-yl]thio}- N-[3- (trifluoromethyl)phenyl]acetamide	H_2N N S N H_2N N S N
67	(S)-1-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]prolinamide	H ₂ N N N F F
68	(2R)-2-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]oxy}-N- [3- (trifluoromethyl)phenyl]propanamide	$-S \longrightarrow N \longrightarrow F \longrightarrow F$ $N \longrightarrow N \longrightarrow N \longrightarrow N$ $H_2N \longrightarrow O$
69	1-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]oxy}-N- [3- (trifluoromethyl)phenyl]cyclopropane carboxamide	-S N
70	(2S)-2-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]oxy}-3- methyl-N-[3- (trifluoromethyl)phenyl]butanamide	H_2N N N N N N N N N N

Table 3

Entry	Name	Structure
72	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-2- methyl-N-[3- (trifluoromethyl)phenyl]glycinamide	H ₂ N N N N N N N N N N N N N N N N N N N
73	1-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]amino}- N-[3- (trifluoromethyl)phenyl]cyclopropane carboxamide	-S N
74	N ² -[2-amino-5-cyano-6- (methylsulfinyl)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L- alaninamide	H ₂ N N N N F F
75	N ² -[2-amino-5-cyano-6- (methylsulfonyl)pyrimidin-4-yl]-N- [3-(trifluoromethyl)phenyl]-L- alaninamide	H ₂ N N H N F F
76	N ² -(5-cyano-2-morpholin-4- ylpyrimidin-4-yl)-N-[3- (trifluoromethyl)phenyl]glycinamide	N H F F
78	N ² -[2-amino-5-cyano-6- (methyloxy)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L- alaninamide	H_2N N N N N N N N N N

Table 3

Entry	Name	Structure
79	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[2- (methyloxy)-5- (trifluoromethyl)phenyl]-L- alaninamide	H ₂ N N N N CF ₃
80	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[2- chloro-5-(trifluoromethyl)phenyl]-L- alaninamide	H_2N N N N N N N N N N
83	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-D- alaninamide	H_2N N N N N N N N N N
84	2-[(2-amino-5-cyano-6-morpholin-4-ylpyrimidin-4-yl)thio]-N-[3-(trifluoromethyl)phenyl]acetamide	NH ₂ N N N N N N N N N N N N N N N N N N N
85	(R)-1-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]prolinamide	H ₂ N N N H F F
86	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L- ornithinamide	$\begin{array}{c c} S & NH_2 \\ \hline \\ H_2N & N & N \\ \hline \\ N & O \end{array}$

Table 3

Entry	Name	Structure
87	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-2-[2- (dimethylamino)ethyl]-N-[3- (trifluoromethyl)phenyl]glycinamide	H_2N CF_3 CF_3
88	N ² -[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L- alaninamide	H ₂ N N N H O CF ₃
89	N ² -(2,6-diamino-5-cyanopyrimidin-4-yl)-N-[3-(trifluoromethyl)phenyl]-L-alaninamide	H_2N N N N N N N N N N
90	N ² -(2-amino-5-cyanopyrimidin-4-yl)-N-[3-(trifluoromethyl)phenyl]-L-alaninamide	H_2N N N N N N N N N N
91	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-2- methyl-N-[3- (trifluoromethyl)phenyl]-L- alaninamide	H_2N N N N N N N N N N
93	2-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-1,2- dimethyl-N-[3- (trifluoromethyl)phenyl]hydrazinecar boxamide	H_2N N N N N N N N N N

Table 3

Entry	Name	Structure
94	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[3- amino-5-(trifluoromethyl)phenyl]-L- alaninamide	H_2N N N N N N N N N N
95	ethyl [1-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-2-({[3- (trifluoromethyl)phenyl]amino}carbo nyl)hydrazino]acetate	S CN H ₂ N N N N CF ₃
96	2-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-2- methyl-N-[3- (trifluoromethyl)phenyl]hydrazinecar boxamide	H_2N N N N N N N N N N
100	N^2 -[5-cyano-2-(methylthio)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]glycinamide	S N N N CF3
101	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-2- (tetrahydro-2H-pyran-4-ylmethyl)-N-[3- (trifluoromethyl)phenyl]glycinamide	H ₂ N N N CF ₃

Table 3

Entry	Name	Structure
102	N ² -(2-amino-5-cyano-6-{[2- (dimethylamino)ethyl]oxy}pyrimidin-4-yl)- N-[3-(trifluoromethyl)phenyl]-L- alaninamide	H ₂ N N N H CF ₃
103	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-6-{[(1,1- dimethylethyl)oxy]carbonyl}-N-[3- (trifluoromethyl)phenyl]-L-lysinamide	NH ₂ NH ₂ NH
104	2-amino-4-(methylthio)-6-(methyl{(1S)-1- [6-(trifluoromethyl)-1H-benzimidazol-2- yl]ethyl}amino)pyrimidine-5-carbonitrile	NC NH2 CF3
105	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-2-[2- (tetrahydro-2H-pyran-4-yl)ethyl]-N-[3- (trifluoromethyl)phenyl]glycinamide	$S \xrightarrow{NH_2} N \xrightarrow{N} N N \xrightarrow{N} N N \xrightarrow{N} N N \xrightarrow{N} N N N N N N N N N N N N N N N N N N $
106	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[3-{[2- (diethylamino)ethyl]amino}-5- (trifluoromethyl)phenyl]-L-alaninamide	S NH ₂ NH ₂ NH NH NH NH CF ₃

Table 3

Entry	Name	Structure
107	2-amino-4-(methylthio)-6-({(1S)-1-[6- (trifluoromethyl)-1H-benzimidazol-2- yl]ethyl}amino)pyrimidine-5-carbonitrile	$-S \longrightarrow N \longrightarrow K \longrightarrow K$
108	2-{2-amino-5-cyano-6-[1-(3- trifluoromethyl-phenylcarbamoyl)-1S- ethylamino]-pyrimidin-4-ylamino}-N-(3- trifluoromethyl-phenyl)-2S-propionamide	H_2N N N N N N N N N N
109	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-2-methyl-N- (3-methylphenyl)glycinamide	S NH ₂ N N N N N N N N N N N N N N N N N N N
110	N^2 -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-2-methyl-N- [3-(1-methylethyl)phenyl]glycinamide	S NH ₂ N N N N N N N N N N N N N N N N N N N
111	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-5- [imino(nitroamino)methyl]-N-[3- (trifluoromethyl)phenyl]-L-ornithinamide	$\begin{array}{c c} & H \\ & N \\ & CF_3$

Table 3

Entry	Name	Structure
112	methyl 3-({N-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-L- alanyl}amino)-5-(trifluoromethyl)benzoate	$S \xrightarrow{NH_2} H \xrightarrow{CF_3} CF_3$
113	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-(3- nitrophenyl)-L-alaninamide	S NH ₂ N N N N N N NO ₂ NO ₂
114	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L-lysinamide	NH ₂ NH ₂ NH ₂ NH ₂ CF ₃
115	N ² -[2-amino-5-cyano-6- (propyloxy)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L-alaninamide	NH ₂ NH ₂ NH ₂ NH ₂ CF ₃
117	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L-argininamide	NH ₂ NH ₂ NH NH NH CF ₃
118	N ² -[2-amino-5-cyano-6- (methylsulfinyl)pyrimidin-4-yl]-N-2-methyl- N-[3-(trifluoromethyl)phenyl]-L- alaninamide	NH ₂ NH ₂ NH ₂ NH ₂ NH ₂ NH ₂ CF ₃

Table 3

Entry	Name	Structure
119	N ² -[2-amino-5-cyano-6- (methyloxy)pyrimidin-4-yl]-N-2-methyl-N- [3-(trifluoromethyl)phenyl]-L-alaninamide	NH ₂ N N N CF ₃
120	N ² -[2-amino-5-cyano-6- (propyloxy)pyrimidin-4-yl]-N-2-methyl-N- [3-(trifluoromethyl)phenyl]-L-alaninamide	NH ₂ N N N CF ₃
121	N^2 -[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-N-2-methyl-N-[3- (trifluoromethyl)phenyl]-L-alaninamide	NH ₂ N N N CF ₃
122	N ² -{2-amino-5-cyano-6-[(1- methylethyl)oxy]pyrimidin-4-yl}-N-[3- (trifluoromethyl)phenyl]-L-alaninamide	$ \begin{array}{c c} & & \\$
123	N-5-acetyl-N-2-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L-ornithinamide	NH ₂ NH ₂ NH ₂ NH ₂ NH ₂ CF ₃
124	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-(3- aminophenyl)-L-alaninamide	$\begin{array}{c c} & NH_2 \\ & N \\ & N \\ & NH_2 \\ & NH_2 \end{array}$

Table 3

Entry	Name	Structure
125	3-({N-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-L- alanyl}amino)-N-[2-(dimethylamino)ethyl]- 5-(trifluoromethyl)benzamide	NH ₂ NH ₂ NH NH NH CN NH CF ₃
126	2-(methyloxy)ethyl ((4S)-4-{[2-amino-5- cyano-6-(methylthio)pyrimidin-4- yl]amino}-5-oxo-5-{[3- (trifluoromethyl)phenyl]amino}pentyl)carb amate	$\begin{array}{c c} & & & \\ & & & &$
127	2-[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]hydrazinecarboxa mide	NH ₂ N H H H CF ₃ CF ₃
128	1,1-dimethylethyl ((4S)-4-{[2-amino-5- cyano-6-(ethyloxy)pyrimidin-4-yl]amino}- 5-oxo-5-{[3- (trifluoromethyl)phenyl]amino}pentyl)carb amate	NH ₂ NH ₂ NH ₂ O t-Bu CF ₃
130	3-({N-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-methyl-L- alanyl}amino)-N-[2- (dimethylamino)ethyl]-5- (trifluoromethyl)benzamide	S.CH ₃ N CH ₃ H CH ₃ H CH ₃ O CH ₃ O HN O H ₃ C.N.CH ₃

Table 3

Entry	Name	Structure
131	3-({N-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-methyl-L- alanyl}amino)-N-[3-(4-methylpiperazin-1- yl)propyl]-5-(trifluoromethyl)benzamide	S.CH ₃ Chiral N CH ₃ H CH ₃ O CF ₃ CH ₃ O HN O
132	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N~2~-methyl- N-{3-[(trifluoromethyl)oxy]phenyl}-L- alaninamide	S.CH ₃ N CH ₃ H OF CH ₃ O
133	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-(3- bromophenyl)-N~2~-methyl-L- alaninamide	H ₃ C S CNCH ₃ H Br CH ₃ O Chiral
134	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-{2-{[2- (dimethylamino)ethyl]oxy}-5- [(trifluoromethyl)oxy]phenyl}-N~2~- methyl-L-alaninamide	H ₂ N N CH ₃ H O F F H ₃ C·N·CH ₃

Table 3

Entry	Name	Structure
135	3-({N-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-methyl-L- alanyl}amino)-N-(2-morpholin-4-ylethyl)- 5-(trifluoromethyl)benzamide	S.CH ₃ Chiral N CH ₃ H CH ₃ O HN O
136	N ² -[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-N~2~-methyl-N- [3-(trifluoromethyl)phenyl]-L-lysinamide	CH ₃ NH ₂ Chiral N N N N F F CH ₃ O
137	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[3-{[2- (dimethylamino)ethyl]oxy}-5- (trifluoromethyl)phenyl]-L-alaninamide	S.CH ₃ N CH ₃ H F F F O N CH ₃ CH ₃ CH ₃
138	(2S)-2-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]amino}-3-oxo- 3-{[3-(trifluoromethyl)phenyl]amino}propyl acetate	H ₃ C·S O CH ₃ Chiral H ₂ N N N N CF ₃

Table 3

Entry	Name	Structure
139	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N~1~-[3- (trifluoromethyl)phenyl]-L-glutamamide	H ₃ C.S H ₂ N O Chiral H ₂ N N N N CF ₃
140	2-[2-amino-5-cyano-6- (methyloxy)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]hydrazinecarboxa mide	H ₃ C. O N H H F H ₂ N N N O
141	3-({N-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-L- alanyl}amino)-N-hydroxy-5- (trifluoromethyl)benzamide	S.CH ₃ N N CH ₃ H N CF ₃ H N O OH
142	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-3- (dimethylamino)-N-[3- (trifluoromethyl)phenyl]-L-alaninamide	H ₃ C S Chiral Chiral Chiral H ₂ N N N N F F F F F F F F F F F F F F F F
143	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-5-morpholin-4- yl-N-[3-(trifluoromethyl)phenyl]-L- norvalinamide	H ₃ C. S N H F F F F F F F F F F F F F F F F F F

Table 3

Entry	Name	Structure
144	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N~5~-[2- (methyloxy)ethyl]-N-[3- (trifluoromethyl)phenyl]-L-ornithinamide	S.CH ₃ Chiral NH H ₂ N N N CF ₃
145	3-({N-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-L- alanyl}amino)-5-(trifluoromethyl)benzoic acid	S.CH ₃ Chiral N CH ₃ H CH ₃ H CF ₃ HOOO
146	methyl N~2~-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L-alpha- glutaminate	H ₃ C·S H ₃ C·O O Chiral H ₂ N N N CF ₃
147	N ⁵ -(aminocarbonyl)-N~2~-[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-L-ornithinamide	O NH ₂ Chiral NH
148	N ² -[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L-ornithinamide	CH ₃ Chiral NH ₂ H ₂ N N N N F F

Table 3

Entry	Name	Structure
149	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L-alpha-glutamine	H ₃ C. S HO O Chiral H ₂ N N N CF ₃
150	N ² -[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L-serinamide	CH ₃ Chiral CH ₃ CN OH H ₂ N N N N CF ₃
151	. N ² -[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-O- (phenylmethyl)-N-[3- (trifluoromethyl)phenyl]-L-serinamide	CH ₃ CN H ₂ N N N CN H ₂ N CF ₃
152	N ² -[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L-argininamide	CH ₃ H ₂ N NH Chiral NH NH CF ₃

Table 3

Entry	Name	Structure
153	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N~2~-methyl- N ⁶ -{[(phenylmethyl)oxy]carbonyl}-N-[3- (trifluoromethyl)phenyl]-L-lysinamide	HN O H ₃ C S N H ₂ N N CH ₃ O F F F
154	N-α-[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L-tyrosinamide	H ₃ C O OH Chiral H ₂ N N N CF ₃
155	N ⁵ -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L-ornithinamide	H ₃ C.S.N.HN H ₂ N.N.N.O.NH ₂
156	N ² -[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-N~6~,N~6~- dimethyl-N-[3-(trifluoromethyl)phenyl]-L- lysinamide	CH ₃ H ₃ C·N·CH ₃ Chiral

Table 3

Entry	Name	Structure
157	N ² -[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-N-[3-[(4- methylpiperazin-1-yl)carbonyl]-5- (trifluoromethyl)phenyl]-L-alaninamide	CH ₃ Chiral N CH ₃ H CF ₃ N CF ₃ N CF ₃ CF ₃
158	3-({N-[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-L-alanyl}amino)- N-(3-pyrrolidin-1-ylpropyl)-5- (trifluoromethyl)benzamide	CH ₃ Chiral N CH ₃ H CF ₃ HN O
159	3-({N-[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-L-alanyl}amino)- N-(2-morpholin-4-ylethyl)-5- (trifluoromethyl)benzamide	CH ₃ Chiral N CH ₃ H CF ₃ HN O

Table 3

Entry	Name	Structure
160	3-({N-[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-L-alanyl}amino)- N-[2-(dimethylamino)ethyl]-5- (trifluoromethyl)benzamide	CH ₃ Chiral N CH ₃ H CF ₃ HN O H ₃ C Chiral
161	3-({N-[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-L-alanyl}amino)- N-[3-(4-methylpiperazin-1-yl)propyl]-5- (trifluoromethyl)benzamide	CH ₃ Chiral N CH ₃ H CH ₃ H CF ₃ HN O H ₃ C N N CF ₃
162	N ² -[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-N~2~-methyl- N ⁶ -{[(phenylmethyl)oxy]carbonyl}-N-[3- (trifluoromethyl)phenyl]-L-lysinamide	CH ₃ HN O CH ₃ HN O F F F CH ₃ O

Table 3

Entry	Name	Structure
163	1,1-dimethylethyl ((4S)-4-{[2-amino-5-cyano-6-(ethyloxy)pyrimidin-4-yl]amino}-5-oxo-5-{[3-(trifluoromethyl)phenyl]amino}pentyl)carbamate	H ₃ C CH ₃ Chiral H ₃ C CH ₃ O NH H ₂ N N H F F
164	(2S)-2-{[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]amino}-3-oxo-3- {[3-(trifluoromethyl)phenyl]amino}propyl acetate	CH ₃ Chiral · Chiral
165	phenylmethyl N~2~-[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L-alpha- glutaminate	CH ₃ O O CN H CF ₃
166	N^2 , N^5 -diacetyl-N~2~-[2-(acetylamino)-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-L-ornithinamide	O CH ₃ Chiral O CH ₃ Chiral O CH ₃ Chiral O CH ₃ Chiral

Table 3

Entry	Name	Structure
167	2-(methyloxy)ethyl ((4S)-4-{[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]amino}-5-oxo-5-{[3-(trifluoromethyl)phenyl]amino}pentyl)carbamate	O O O CH ₃ Chiral NH NH CF ₃
168	N ² -[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-5-morpholin-4-yl- N-[3-(trifluoromethyl)phenyl]-L- norvalinamide	CH ₃ O N H ₂ N H O Chiral
169	N-((4S)-4-{[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]amino}-5-oxo-5- {[3-(trifluoromethyl)phenyl]amino}pentyl)- N,N-dimethylmethanaminium	CH ₃ CH ₃ Chiral N.CH ₃ CH ₃ CH ₃ CH ₃ F F F
170	Methyl N ² -[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L-alpha- glutaminate	CH ₃ Chiral OH ₃ C.O H ₂ N N H Chiral
171	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N~6~,N~6~- dimethyl-N-[3-(trifluoromethyl)phenyl]-L- lysinamide	H ₃ C _N .CH ₃ Chiral

Table 3

Entry	Name	Structure
172	N ² -[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-N~2~-methyl-N- {3-[(trifluoromethyl)oxy]phenyl}-L- alaninamide	CH ₃ Chiral
173	N ² -[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L-alpha-glutamine	CH ₃ HO O CN H N CF ₃
174	N~2~-[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-N-(3- bromophenyl)-N~2~-methyl-L- alaninamide	CH ₃ Chiral Chiral Chiral Chiral
175	N^2 -[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]- N^1 -[3- (trifluoromethyl)phenyl]-L-glutamamide	CH ₃ Chiral Chiral CH ₂ N O CN H N CF ₃
176	N ² -[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-3- (dimethylamino)-N-[3- (trifluoromethyl)phenyl]-L-alaninamide	CH ₃ Chiral O Chiral O CH ₃ O CH ₃ N-CH ₃ F F F

Table 3

Entry	Name	Structure
177	2-(2-amino-5-cyano-6- ethoxypyrimidin-4-ylamino)-5- hydrazinyl-5-oxo-N-(3- (trifluoromethyl)phenyl)pentanamide	CH ₃ ONH ₂ Chiral
178	N ² -[2-amino-5-cyano-6- (methyloxy)pyrimidin-4-yl]-3- (dimethylamino)-N-[3- (trifluoromethyl)phenyl]-L-alaninamide	H ₃ C·O Chiral Chiral H ₂ N N N N F F H O F
179	N ² -[2-amino-5-cyano-6- (methyloxy)pyrimidin-4-yl]-N-[3-{[2- (dimethylamino)ethyl]oxy}-5- (trifluoromethyl)phenyl]-L-alaninamide	H ₂ N N H O F F O N CH ₃ CH ₃ CH ₃ CH ₃
180	N ² -[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-N-[3-{[2- (dimethylamino)ethyl]oxy}-5- (trifluoromethyl)phenyl]-L-alaninamide	Chiral Chiral Chiral Chiral
181	N^2 -[2-amino-5-cyano-6- (methyloxy)pyrimidin-4-yl]-N-(3-bromophenyl)- N^2 -methyl-L-alaninamide	H ₃ C. Chiral Chiral H ₂ N N N N Br CH ₃ O

Table 3

Entry	Name	Structure
182	phenylmethyl N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L-alpha- glutaminate	Chiral H ₃ C S O O H ₂ N N N CF ₃
183	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-O- (phenylmethyl)-N-[3- (trifluoromethyl)phenyl]-L-serinamide	H ₃ C·S CN O H CF ₃
184	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N~5~,N~5~- bis[2-(methyloxy)ethyl]-N-[3- (trifluoromethyl)phenyl]-L-ornithinamide	S.CH ₃ Chiral N O.CH ₃ Chiral N CF ₃
185	1,1-dimethylethyl ((4S)-4-{[2-amino-5- cyano-6-(methyloxy)pyrimidin-4- yl]amino}-5-oxo-5-{[3- (trifluoromethyl)phenyl]amino}pentyl)carb amate	H ₂ N N N CF ₃ H ₂ N CF ₃ H ₂ N CF ₃

Table 3

Entry	Name	Structure
186	N ⁵ -acetyl- N ² -[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L-ornithinamide	CH ₃ O CH ₃ Chiral NH H ₂ N N N CF ₃
187	N ⁵ ~-acetyl- N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L-ornithinamide	O CH ₃ Chiral NH H ₂ N N N CF ₃
188	N ² -[2-amino-5-cyano-6- (methyloxy)pyrimidin-4-yl]- N ² -methyl-N- {3-[(trifluoromethyl)oxy]phenyl}-L- alaninamide	H ₂ N N N OCF ₃
189	methyl 3-({N-[2-amino-5-cyano-6- (methyloxy)pyrimidin-4-yl]-L- alanyl}amino)-5-(trifluoromethyl)benzoate	H ₂ N N CF ₃ H CF ₃ H O CF ₃

Table 3

Entry	Name	Structure
190	3-({N-[2-amino-5-cyano-6- (methyloxy)pyrimidin-4-yl]-L- alanyl}amino)-N-[2-(dimethylamino)ethyl]- 5-(trifluoromethyl)benzamide	Chiral CH ₃ H CH ₃ H CF ₃ O NH H ₃ C N. CH ₃
191	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-3-morpholin-4- yl-N-[3-(trifluoromethyl)phenyl]-L- alaninamide	H ₃ C·S Chiral
192	N ² -[2-amino-5-cyano-6- (methyloxy)pyrimidin-4-yl]-3-morpholin-4- yl-N-[3-(trifluoromethyl)phenyl]-L- alaninamide	H ₃ C. O Chiral
193	N ² -[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-3-morpholin-4-yl- N-[3-(trifluoromethyl)phenyl]-L- alaninamide	CH ₃ Chiral
194	N^{5} -(aminocarbonyl)- N^{2} -[2-amino-5-cyano-6-(ethyloxy)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-L-ornithinamide	O NH ₂ Chiral OEt NH H ₂ N N F F

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Table 3

Entry	Name	Structure
195	N~2~-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-D-lysinamide	SMe N H F F F H O N H O
196	N ² -[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-D-lysinamide	OEt N H F F F H O H O H
197	N ² -[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-O-methyl-N-[3- (trifluoromethyl)phenyl]-L-serinamide	CH ₃ Chiral CH ₃ CH
198	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N~5~- (methylsulfonyl)-N-[3- (trifluoromethyl)phenyl]-L-ornithinamide	CH ₃ Chiral O=\$=0 NH H ₂ N N H CF ₃

- (currently amended) A pharmaceutical composition comprising the compound 35. according to claims $1\underline{3}$ and a pharmaceutically acceptable carrier.
- 36. (currently amended) A metabolite of the compound or the pharmaceutical composition according to claims 13.

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37. (currently amended) A method of modulating in vivo activity of a kinase, the method comprising administering to a subject an effective amount of a composition comprising a compound according to claim 13 and/or a compound explicitly provided against in claim-1.

- 38. (original) The method according to claim 37, wherein the kinase is p70S6K.
- 39. (original) The method according to claim 38, wherein modulating the in vivo activity of p70S6K comprises inhibition of p70S6K.
- 40. (currently amended) A method of treating diseases or disorders associated with uncontrolled, abnormal, and/or unwanted cellular activities, the method comprising administering, to a mammal in need thereof, a therapeutically effective amount of a composition comprising a compound according to claim 13 and/or a compound explicitly provided against in claim 1.
- 41. (currently amended) A method of screening for modulator of a p70S6 kinase, the method comprising combining either a compound according to claim 13 and/or a compound explicitly provided against in claim 13, and at least one candidate agent and determining the effect of the candidate agent on the activity of said kinase.
- 42. (currently amended) A method of inhibiting proliferative activity in a cell, the method comprising administering an effective amount of: the compound according to claims 13 and/or a compound explicitly provided against in claim 1.
- 43. (currently amended) A method of inhibiting abnormal metabolic activity in a cell, the method comprising administering an effective amount of: the compound according to any of claims 13 and/or a compound explicitly provided against in claim-1.